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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,858

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Matthew P.J. Baker

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EXAMINER

SIVJI, NIZAR N

ART UNIT

PAPER NUMBER

2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,858	<b>Applicant(s)</b> BAKER ET AL.	
	<b>Examiner</b> NIZAR SIVJI	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Status of the Claims***

1. Claims 1-8, 11-24 are currently pending in this application.
2. In view of the Supplemental Appeal Brief filed on 12/8/2009, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/George Eng/

Supervisory Patent Examiner, Art Unit 2617.

***Claim Rejections - 35 USC § 112***

3. Claim 1 provides for the use of method of operating a radio network computing a primary station and plurality of secondary station, but, since the claim does not set forth

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any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8, 11-14, 18-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Sinnarajah et al. Pub. No. 2004/0008679.

**Regarding Claim 1**, Sinnarajah discloses a primary station (PS) and a plurality of secondary stations (SS 1, SS2, SS3)(Para 102-103, the sector S and subscriber station MS1 and MS2 that are member of the group), wherein the primary station determines a level of interest by users of secondary stations in a service by providing a plurality of

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random access slots that are selectively configured for permitting a temporary or permanent allocation of a portion of the plurality of random access slots based on the level of interest of the users of the secondary stations(Para 88-90, when the multicast call is to be initiated, the subscriber stations that are member of the group must be notified. Once the notification is received then the subscriber station determines whether and how it need to respond to the notification and based on that assign channel allocation), wherein a secondary station of the plurality of secondary stations indicates the level of interest by transmitting a predetermined signal in a preselected one of the plurality of random access slots(Para 91, the response allow the access network to decide, whether to assign a shared channel or a dedicated channel).

**Regarding Claim 2**, Sinnarajah discloses wherein the primary station estimates the level of interest from a number of transmitted indications and selects a transmission mode of the service in dependence on whether the level of interest is relatively high or relatively low (Para 91).

**Regarding Claim 3**, Sinnarajah discloses wherein the transmission mode for the relatively high level of interest is point-to-multipoint (Para 124).

**Regarding Claim 4**, Sinnarajah discloses wherein the transmission mode for the relatively low level of interest is point-to-point (Para 126).

**Regarding Claim 5**, Sinnarajah discloses wherein the primary station sets a threshold level for determining the transmission mode of the service and, when the number of transmitted indications exceeds the threshold level, the transmission mode for the relatively high level of interest is operated (Para 105).

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**Regarding Claim 6**, Sinnarajah discloses wherein each access slot of the plurality of random access slots includes a combination of one time slot and one signature, and wherein the primary station maps each of the plurality of random access slots to a different service such that all the secondary stations interested in one service transmit using one of the plurality of random access slots, and in that each combination of one time slot and one signature is contained in not more than one of the plurality of random access slots(Para 67-68).

**Regarding Claim 7**, Sinnarajah discloses wherein each of the plurality of random access slots uses the same signature and in that each random access slot in the plurality of random access slots uses a different time slot (Para 67-68).

**Regarding Claim 8**, Sinnarajah discloses wherein each of the plurality of random access slots uses the same time slot and in that each random access slot in the plurality of random access slots uses a different signature (Para 67-68).

**Regarding Claim 11**, Sinnarajah discloses wherein the level of interest is transmitted as spread spectrum signals and a number of indications is estimated by estimating a number of correlation peaks in a given random access time slot (Para 5).

**Regarding Claim 12**, Sinnarajah discloses wherein the level of interest is transmitted as spread spectrum signals and a number of indications is estimated by estimating a received energy in a given random access slot (Para 174).

**Regarding Claim 13**, Sinnarajah discloses wherein the secondary stations are allocated to a respective one of two or more pluralities of access slots and in that a

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secondary station of the plurality of secondary stations desiring to transmit an indication of interest, transmits in its allocated plurality of random access slots (Para 90).

**Regarding Claim 14**, Sinnarajah discloses wherein when an estimated level of interest exceeds a predetermined level of interest, the primary station instructs the plurality of secondary stations waiting to transmit in their allocated access slot not to transmit (Para 174).

**Regarding Claim 18**, Sinnarajah discloses a primary station (PS) and a plurality of secondary stations (SS 1, SS2, SS3) (Para 102-103, the sector S and subscriber station MS1 and MS2 that are member of the group), wherein the primary station (PS) includes means for determining a level of interest by users of secondary stations in a service, the means providing a plurality of random access slots that are selectively configured for permitting a temporary or permanent allocation of a portion of the plurality of random access slots based on the level of interest of the users of the secondary stations (Para 88-90, when the multicast call is to be initiated, the subscriber stations that are member of the group must be notified. Once the notification is received then the subscriber station determines whether and how it need to respond to the notification and based on that assign channel allocation), wherein a secondary station of the plurality of secondary stations indicates the level of interest by transmitting a predetermined signal in a preselected one of the plurality of random access slots (Para 91, the response allow the access network to decide, whether to assign a shared channel or a dedicated channel).

**Regarding Claim 19**, Sinnarajah discloses further comprising estimating means for

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estimating the level of interest from a number of transmitted indications and mode selection means for selecting a transmission mode of the service in dependence on whether the level of interest is relatively high or relatively low (Para 91, 124-126).

**Regarding Claim 20**, Sinnarajah discloses wherein each access slot includes a combination of one time slot and one signature, wherein the primary station (PS) comprises means for mapping each of the plurality of random access slots to a different service such that all the secondary stations interested in one service transmit using one of the plurality of random access slots, and wherein each combination of one time slot and one signature is contained in not more than one of the plurality of random access slots(Para 67-68).

**Regarding Claim 21**, Sinnarajah discloses further comprising spread spectrum transceiving means and wherein an estimating means is adapted to estimate the level of interest by estimating a number of correlation peaks in a respective random access slot (Para 5).

**Regarding Claim 22**, Sinnarajah discloses further comprising spread spectrum transceiving means and wherein an estimating means is adapted to estimate the level of interest by estimating a received energy in a respective random access slot(Para 174).

**Regarding Claim 23**, Sinnarajah discloses a radio network comprising at least one primary station (PS) and a plurality of secondary stations (SS 1, SS2, SS3) )(Para 102-103, the sector S and subscriber station MS1 and MS2 that are member of the group), wherein the primary station (PS) includes means for determining a level of interest by



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users of secondary stations in a service, the means providing a plurality of random access slots that are selectively configured for permitting a temporary or permanent allocation of a portion of the plurality of random access slots based on the level of interest of the users of the secondary stations (Para 88-90, when the multicast call is to be initiated, the subscriber stations that are member of the group must be notified. Once the notification is received then the subscriber station determines whether and how it need to respond to the notification and based on that assign channel allocation), wherein a secondary station of the plurality of secondary stations indicates the level of interest by transmitting a predetermined signal in a preselected one of the plurality of random access slots (Para 91, the response allow the access network to decide, whether to assign a shared channel or a dedicated channel).

**Regarding Claim 24**, Sinnarajah discloses a primary station (PS) and a plurality of the secondary stations (SS1, SS2, SS3) (Para 102-103, the sector S and subscriber station MS1 and MS2 that are member of the group), wherein the primary station (PS) includes means for determining a level of interest by users of secondary stations in a service, the means providing a plurality of random access slots that are selectively configured for permitting a temporary or permanent allocation of a portion of the plurality of random access slots based on the level of interest of the users of the secondary stations (Para 88-90, when the multicast call is to be initiated, the subscriber stations that are member of the group must be notified. Once the notification is received then the subscriber station determines whether and how it need to respond to the notification and based on that assign channel allocation), wherein a secondary station of the

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plurality of secondary stations indicates the level of interest by transmitting a predetermined signal in a preselected one of the plurality of random access slots(Para 91, the response allow the access network to decide, whether to assign a shared channel or a dedicated channel).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinnarajah et al. Pub. No. 2004/0008679 in view of Toth et al. Pub. No. 20050053068.

**Regarding Claim 15**, Sinnarajah discloses that a secondary station of the plurality of secondary stations indicating an interest in the service (Para 91). Sinnarajah differ from the claimed invention in not specifically teaching interest in the service indicates a quality level for receiving the service. However, Toth discloses (Para 77 and 95) a packet radio data network where GGSN receives information about the QoS parameters

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for the multicast service from the source directly or indirectly. Therefore, it is obvious to one having ordinary skill in the art at the time the invention was made that interest in the service indicates a quality level for receiving the service as per teaching of Toth so as to identify the subscriber station and provide service based on service requested.

**Regarding Claim 16**, Sinnarajah discloses wherein the primary station transmits a higher quality level of service in a mode different from the transmission of a lower quality level of service (Para 91).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sinnarajah et al. Pub. No. 2004/0008679 in view of Cooper et al Pub. No. 2002/0069038

**Regarding Claim 17**, Sinnarajah differs from the claimed invention in not specifically teaching the primary station transmits a basic data stream as a point-to-multipoint transmission and a supplementary data stream for enhancing a quality of the basic data stream as a point-to-point transmission. However, Cooper discloses (Para 17-19) a primary station coupled to a plurality of secondary stations where the primary station can be a simple transmitter for point-to-point or point-to-multipoint with one or more of the secondary stations. The primary station uses the error correcting code to detect received errors in the information data which may occur at fixed periodic intervals or at sporadic intervals that coincide with the quality of the link. Therefore, it is obvious to one having ordinary skill in the art at the time the invention was made that the primary station transmits a basic data stream as a point-to-multipoint transmission and a supplementary data stream for enhancing a quality of the basic data stream as a point-to-point

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transmission as per teaching of Cooper so as to minimize the through-put delay or latency in the communication equipment.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIZAR SIVJI whose telephone number is (571)270-7462. The examiner can normally be reached on 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/NIZAR SIVJI/  
Examiner, Art Unit 2617

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